Claims:

1.   A method of processing video data to detect field characteristics of the data, said data having a plurality of fields, including the steps of:

5   comparing first and second fields, said first field being a successive field of said second field;

       comparing pixel values of respective sub-blocks of said first field and a third field, said second field being a successive field of said third field;

       determining whether said first field is an interlaced field or a progressive field with
10 respect to a successive field of said first field based on said steps of comparing.

2.   The method as claimed in claim 1, further including the step of accumulating, in an accumulator means, absolute differences between the pixel values of said first and third fields.

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3.   The method as claimed in claim 2, wherein said step of determining is further based on an output of said accumulator means.

4.   The method as claimed in claim 2, further including the step of determining whether
20 said first field is a repeated field based on a result of said step of comparing pixel values, on said output of said accumulator means and on a result of said step of determining whether said first field is an interlaced field or a progressive field.

5.   The method as claimed in claims 3 or 4, further including the step of determining
25 whether or not there has been a scene change between said first and third fields, at least in part based on said output of said accumulator means.

6.   The method as claimed in claim 5, further including the step of grouping successive fields according to one or more of said steps of determining.

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7.   The method as claimed in any preceding claim, wherein said step of comparing first

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and second fields provides an output of the sum of a plurality of absolute pixel differences between respective said first and second fields, said absolute pixel differences exceeding a threshold value.

5   8.   A system for executing the method as claimed in any preceding claim.

9.   Apparatus for processing video data to detect field characteristics of the data, said data having a plurality of fields, including:

first comparison means for comparing first and second fields, said first field being a
10 successive field of said second field;

second comparison means for comparing pixel values of respective sub-blocks of said first field and a third field, said second field being a successive field of said third field;

progressive/interlace decision means for determining whether said first field is an interlaced field or a progressive field with respect to a successive field of said first field based
15 on respective outputs of said first and second comparison means.

10.   The apparatus as claimed in claim 9, further including accumulator means for accumulating absolute differences between the pixel values of said first and third fields.

20 11.   The apparatus as claimed in claim 10, wherein the determining of whether said first field is an interlaced field or a progressive field is further based on an output of said accumulator means.

12.   The apparatus as claimed in claim 11, further including repeat field decision means
25 for determining whether said first field is a repeated field based on said output of said second comparison means, said output of said accumulator means and on an output of said progressive/interlace decision means.

13.   The apparatus as claimed in claims 11 or 12, further including scene change decision
30 means for determining whether or not there has been a scene change between said first and

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third fields, at least in part based on said output of said accumulator means.

14.   The apparatus as claimed in claim 13, further including field grouping decision means
for grouping successive fields according to one or more of said scene change decision means,
5 repeat field decision means or interlace/progressive decision means.